AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1.-59. (Cancelled)

60. (Previously Presented) A plasma surface processing apparatus for processing a surface of a material to be processed with a processing gas plasmatized under an electric field applied from an electric power source, said apparatus having an electrode structure having a gas passage through which said processing gas is passed along a passage direction and for generating said electric field in said gas passage, said electrode structure comprising:

an elongate metallic first electrode body that is longer in a longitudinal direction orthogonal to said passage direction and shorter in the passage direction,

the first electrode body having an elongate outer first surface which is a flat surface crossing with an arranging direction orthogonal to both the passage direction and the longitudinal direction and which is longer in said longitudinal direction and shorter in the passage direction;

an elongate metallic second electrode body that is longer in said longitudinal direction and shorter in the passage direction,

said second electrode body being arranged in parallel with said first electrode body in the arranging direction,

said second electrode body having an elongate outer second surface which is a flat surface crossing with the arranging direction and facing said first surface in said arranging direction and which is longer in the longitudinal direction and shorter in the passage direction,

one of said first and second electrode bodies being connected with said electric power source,

the other of said first and second electrode bodies being electrically grounded, said electric field being generated between said first and second surfaces; and

an elongate dielectric first case body that is longer in said longitudinal direction and shorter in the passage direction, said first case body being arranged in parallel with said first and second electrode bodies,

said first case body being formed a cross section orthogonal to said longitudinal direction into a U-shape so that said first case body has a first internal space and a first opening,

out of four sides of the first internal space, consisting of two sides of the arranging direction and two sides of the passage direction, three sides being surrounded by the first case body and a remaining side being opened to an outside and provided as the first opening,

said first electrode body being received in said first internal space so that said first surface is contacted with an inner peripheral surface of said first case body,

said second electrode body being disposed outside the first internal space of said dielectric first case body in said arranging direction,

said first opening facing away from said second electrode body,

said gas passage being formed between said dielectric first case body and said second electrode body,

said gas passage being longer in the longitudinal direction and shorter in the passage direction,

a first end of the gas passage in the passage direction being connected with a source of the processing gas,

a second end the of gas passage in the passage direction being connected with a blowoff aperture, and

an end part on a side of said first opening of said first case body being protruded in said one remaining side relative to said first electrode body.

61. (Previously Presented) An electrode structure according to claim 60, further comprising:

an elongate lid made of a solid dielectric material for closing said first opening,

said lid having a longer length dimension in the longitudinal direction and a shorter width dimension in one of the arranging direction and the passage direction,

an end part in the width direction of said lid covering an end surface of said protruded end part in a location more forward in said one remaining side from said first electrode body.

62. (Currently Amended) An electrode structure according to claim 60,

wherein the two sides of the first internal space in the passage direction and a side of the first internal space nearer to the second electrode body in the arranging direction are surrounded by the first case body, and the side of the first internal space further from the second electrode body in the arranging direction is open and provided as the first opening, and

wherein said electrode structure further comprises: an elongate dielectric second case body that is longer in said longitudinal direction and shorter in the passage direction, said second case body being arranged in parallel with said first case body in said arranging direction,

said second case body being formed a cross section orthogonal to said longitudinal direction into a U-shape so that said second case body has a second internal space and a second opening,

two sides of the second internal space in the passage direction and a side of the second internal space nearer to the first electrode body in the arranging direction being surrounded by the ~~first~~ second case body, and a side of the second internal space further from the first electrode body in the arranging direction being opened and provided as the second opening,

said gas passage being defined between said first and second case bodies,

said second electrode body being received in said second internal space so that said second surface is contacted with an inner peripheral surface of said second case body, and

an end part on a side of said second opening of said second case body being protruded in said opposite side in said arranging direction relative to said second electrode body.

63. (Previously Presented) An electrode structure according to claim 62, wherein said first dielectric case body and said second dielectric case body are separately formed.

64. (Previously Presented) An electrode structure according to claim 63, wherein said first dielectric case body has an opposing surface abutted with said second dielectric case body, and said opposing surface is provided with a recess to serve as said gas passage.

65. (Previously Presented) An electrode structure according to claim 62, wherein said first dielectric case body and said second dielectric case body are integrally connected to one another.

66. (Currently Amended) An electrode structure according to claim 62, wherein flow passage sectional area of said gas passage varies along said ~~gas~~ passage direction.

67. (Currently Amended) An electrode structure according to claim 62, wherein said first dielectric case body has a plate defining said gas passage, and a thickness of said plate varies along said ~~gas~~ passage direction.

68. (Currently Amended) An electrode structure according to claim 62, wherein a distance between said first electrode body and said second electrode body varies along said ~~gas~~ passage direction.

69. (Previously Presented) An electrode structure according to claim 62, wherein said first dielectric case body is provided with a gas uniformizing passage for dispersing said processing gas uniformly in said longitudinal direction and for introducing said processing gas into said gas passage.